

INTRODUCTION

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HOW THE COMPUTER USES TRSDOS-16

Whenever you are using a Model 16 program, your computer will, from time to time, need to reference TRSDOS-16. It always looks for TRSDOS-16 on the primary drive.

The primary drive is:

Drive 0 -- if you start up your system under floppy disk control

Drive 4 -- if you start up your system under hard disk control. (It may be your only hard disk drive)

For this reason, if you have a floppy disk system (that is, you don't have the optional hard disk) or if you have a hard disk system and are operating under floppy disk control, you must at all times have a diskette containing TRSDOS-16 in Drive 0.

If you have a hard disk system and want to operate under the control of your hard disk, you need to copy TRSDOS-16 onto your primary drive. The Operator's Read Me First Manual shows how.

LOADING TRSDOS-16

When you install and power up your system, you'll see the TRSDOS-II start-up logo. This means you're in the TRSDOS-II 4.1 Operating System (the Model II mode). You then need to enter the date and time. Enter the date in the form MM/DD/YYYY form. For example, type:

08/21/1982 <ENTER>

for August 21, 1982. You now will be prompted to enter the time. You can skip this question by simply pressing <ENTER>. The time will start at 00.00.00.

If you want to set the time, type the time in the 24-hour format -- HH.MM.SS. The seconds are optional. For example, type:

14.30 <ENTER>

for 2:30 pm.

After entering the date and time, the TRSDOS-16 Operating System AUTOMATICALLY loads and displays:

TRSDOS-16 Ready

This indicates that you are at the 68000 Disk Operating System's command level.

NOTE: A factory-set AUTO command loads the TRSDOS16/SYS program -- the 68000 operating system. It then loads a configuration command file named CONFIG16/SYS which links certain extra operating system modules into memory. If you want to save memory or change the configuration command file, see Appendix B.

To override this factory-set AUTO command, see AUTO in SECTION II.

You can also load TRSDOS-16 from the TRSDOS-II Ready prompt by typing:

BOOT16 TRSDOS16/SYS <ENTER>

WARNING: DO NOT press <BREAK> when you are loading the TRSDOS-16 operating system. If you do, your computer may become confused if interrupted while doing the configuration.

If you accidentally press <BREAK>, you will have to power down your system before trying to load TRSDOS-16 again.

WHAT DOES TRSDOS-16 READY MEAN?

Whenever you see the TRSDOS-16 Ready prompt you know that you are in control of TRSDOS-16 -- not COBOL, PAYROLL, or any of your application programs. Being in control of TRSDOS-16 allows you to do one of these operations:

- . execute a system command
- . execute a program

If you want to perform any other operation, you need to be in control of an application program.

When you are in control of TRSDOS-16 and an error occurs, you'll get one of the error messages listed in Appendix A.

If you get an error message not listed, it came from an application program that is running. You'll need to see the manual which came with the application program for an explanation of the error message.

EXECUTING A COMMAND

You can execute a TRSDOS-16 system command whenever you see the TRSDOS-16 Ready prompt. The command you type can consist of up to 80 characters. You must end the command by pressing <ENTER>.

For example, if you want to see the TRSDOS-16 system commands, type:

LIB <ENTER>

TRSDOS-16 displays a list of all the available system commands and returns to TRSDOS-16 Ready:

APPEND	ASSIGN	ATTRIB	AUTO	BACKUP	CLEAR	CLS	COPY
CREATE	DATE	DEBUG	DIR	DISMOUNT	DO	DRIVE	DUMP
EXEC	FCOPY	FILES	FLOPPY	FORMAT	FORMS	FREE	HELP
KILL	LIB	LIST	LOAD	MOUNT	MOVE	MSG	PATCH
PAUSE	PRINT	LIST	PURGE	RELEASE	RENAME	RESET	RESTORE
SAVE	SETCOM	SIZE	SPOOL	TERMINAL	TIME	VERIFY	VERSION

EXECUTING A PROGRAM

You can also execute a program (such as the Editor) at the TRSDOS-16 Ready prompt. If what you enter is not a recognized system command, TRSDOS-16 checks to see if it is the name of a 68000 program. It checks for the program file on all drives, beginning with the primary drive (Drive 0 or Drive 4) unless you specify drive number.

If TRSDOS-16 finds a matching 68000 program file, it loads and executes the file. Otherwise, you get an error message. For example:

EDIT16 <ENTER>

loads the Editor program. Now you can create a program or edit an existing one.

DISK FILES

You can keep a record of anything you type into your Model 16 by storing it on disk (hard or floppy) in a "disk file". A disk file can contain a program, a collection of data, a project report you intend to make, or almost anything you want it to contain. But, whatever it is, if you want to keep it permanently, you'll have to store it in a disk file.

When the computer stores the file, it indexes the name of the file and it's disk location in a special place on the disk called the disk's directory. Whenever you want to access the file, the computer can immediately find its location by using this directory.

If you want to see how a disk file is created and stored, see the SAMPLE EXERCISE/ CREATING A DISK FILE later in this chapter.

FILESPEC

Whenever you create a disk file, you need to give it a name. This name is just one part of a file specification -- filespec, for short. The filespec is the standard TRSDOS-16 format you'll use every time you reference your file:

filename/ext.password:drive(disk name)

filename

The name of your file can be anything you like, as long as it is one to eight alphanumeric characters, the first of which must be a letter. For example, if you want to save a file containing an inventory list, you could simply name it:

INVNTRY

extension

If you want to further identify your file, you can give it a second name by adding an extension. An extension (indicated

by /ext on our filespec) is a sequence of one to three alphanumeric characters with a preceding slash (/).

You can use an extension to provide additional information on a file. For example, with an extension such as /NEW, /IRS, or /PAY, you could distinguish files with the same name or divide files into categories.

You can also use an extension to indicate the type of file you have. The extension /BAS indicates a BASIC program file; /DAT indicates that a file contains data only; or /SRC defines a SOURCE file.

With the extension /DAT, the new name of our inventory file is:

INVNTRY/DAT

password

Some files allow you to protect them. You can accomplish this protection via a password either when you create the file or with the command ATTRIB.

A password is a sequence of up to eight alphanumeric characters, the first of which must be a letter, with a period (.) preceding it to separate it from the filename.

There are two levels of passwords and the protection they provide -- access passwords and update passwords. These passwords not only can inhibit entry to a file, they also can provide protection at varying levels.

When you initially create a file and assign a password, the access and update passwords are the same. Later, if you choose, you can change these values with the system command ATTRIB and thus provide the additional protection to your files. (See ATTRIB for details.)

With the password Sesame, the new name of our inventory file is:

INVNTRY/DAT.Sesame

drive

Often when you're using your computer, you'll have more than one disk in use. Whether these disks are floppy or hard, you can speed up the file access time by specifying the

drive the desired file is on. Use the form :drive for the drive number.

If you omit a drive number on the filespec, your computer automatically starts looking for the file on all available drives, beginning with the primary drive.

To indicate your inventory file's location on the filespec, type:

```
INVNTRY/DAT.Sesame:2
```

See your Operator's Read Me First Manual (Model 16), Hard Disk Owner's Manual, or Operations Manual (Enhanced Model II) if you are not sure what your drive numbers are.

disk name

You may want to indicate the name of the disk that a file is on. The disk name was assigned when you formatted or backed up the disk.

It takes the form (disk name), which is a field of up to eight alphanumeric characters, the first character being a letter, with parentheses () surrounding the entire name. If you specify the disk name, you must also specify the drive number.

Now, if you're ready to reference your inventory file, enter this complete filespec to ensure that you're getting the right one:

```
INVNTRY/DAT.Sesame:2(WREHSE)
```

Of course, every filespec you enter won't include all of these optional specifications, however, you can use any combination of the fields as long as you follow the guidelines indicated.

Here are some more examples of valid TRSDOS-16 filespecs:

```
DOPROG.OPEN  
CLR/BAS:1  
MOD16:4(TRSDOS16)  
STL12/TXT.Arch:1(TRAVL82)  
GAME1  
THESIS/OLD:2  
CONTEMP:3
```


Wildcards

Certain system commands and SVC's allow you to specify a collection of files by using a "wildcard" mask. An asterisk "*" in a file specification represents a wildcard field and means "any sequence of zero or more characters". For example:

`*/BAS:1`

represents all the files stored on the diskette in Drive 1 having the extension /BAS.

`D*`

represents all the files on the disk in the primary drive, beginning with D, without extensions.

As an example use, if you want a DIRectory of all the files with an extension that begin with the letter D, type:

`DIR D*/* <ENTER>`

TRSDOS-16 returns a listing of all the files beginning with D and having extensions:

Disk Name:TRSDOS			Drive:4		04/09/82		00.25.35	
File Name	Created	Updated	Atrb	File	Rec	# of	-----Sectors-----	
	MM/DD/YY	MM/DD/YY		Typ	Len	Records	Alloc	Used
DATM32/TXT	04/09/82	04/09/82	D*X0	V	+++	+++	1	1
DOBUDGET/SRC	04/09/82	04/09/82	D*X0	V	+++	+++	1	1
DEMOPROG/1	04/09/82	04/09/82	D*X0	V	+++	+++	1	1
DIRECAC/FLE	04/09/82	04/09/82	D*X0	V	+++	+++	1	1
4 Files Displayed								

Super Wildcard

Besides the wildcard "*", TRSDOS-16 has a super wildcard -- "!". You can use it to specify all files, with and without extensions.

For example, if you want to FCOPY all files from a diskette to hard disk, you can use the super-wildcard. This accomplishes in one step what it would take the wildcard two steps to do:

```
FCOPY */*:1 TO 4 <ENTER>
FCOPY *:1 TO 4 <ENTER>
```

Here, the first command FCOPYs files with extensions. The second then FCOPYs files without extensions. But, if you use the super wildcard and type:

```
FCOPY !:1 TO 4 <ENTER>
```

TRSDOS-16 FCOPYs all files on the diskette in Drive 1 to hard disk in one step.

You can use the wildcard and super wildcard with these system commands:

```
DIRECTORY
FCOPY
KILL
MOVE
```

SAMPLE EXERCISE/ CREATING A DISK FILE

This is an example of how to create a command file and then save it to disk. When run, the file will automatically clear the screen and print the date and time in the top left hand corner of the screen. This command file -- known as a DO-file -- is a program made up of one or more system commands or programs that is executed with the command DO.

To create this file, you must first enter the Editor and its Insert mode by typing:

```
EDIT16 <ENTER>
IN <ENTER>
```

(See the DO command in this manual for further information.) Now you should be in the insert mode (with the prompt I?) where you can type in the command lines:

```
CLS <ENTER>
MSG "TODAY'S DATE IS:" <ENTER>
DATE <ENTER>
```

<ENTER>

At this point, the command file is in the computer's memory. If you want to keep or run it, you'll have to save it in a disk file. Type:

SAVE MYPROG <ENTER>

and the Editor writes your program, with the name MYPROG, to disk. Now you have a permanent copy.

Exit the Editor by typing QU <ENTER>.

To run your DO-file, type:

DO MYPROG <ENTER>

TRSDOS-16 will clear your screen and display:

TODAY'S DATE IS:

Fri May 14 1982 134 -- 10.24.30

TRSDOS-16 Ready

.....

Sometime in the future, you may want to run MYPROG again, but you've forgotten the exact filename you gave it. You can look at the directory (as we mentioned earlier) to see how it's filed. Type:

DIR <ENTER>

for a directory listing of the disk in Drive 4. TRSDOS-16 returns a DIRectory listing like this:

Disk Name:TRSDOS			Drive:4		04/09/82		00.25.52	
File Name	Created	Updated	Atrb	File	Rec	# of	----Sectors----	
	MM/DD/YY	MM/DD/YY		Typ	Len	Records	Alloc	Used
DESIGN2	04/05/82	04/05/82	P*X0	F	256	2	2	2
READ/ME	04/05/82	04/05/82	D*X0	F	256	77	77	77
TRSDOS16/SYS	03/26/82	04/16/82	D*X0	F	256	107	107	107
CONFIG16/SYS	03/26/82	04/16/82	D*X0	V	+++	+++	1	1
ASM16	02/25/82	04/16/82	D*X0	F	256	148	148	148
LINK16	02/25/82	04/16/82	D*X0	F	256	64	64	64
EDIT16	03/27/82	04/16/82	D*X0	F	256	50	50	50
BOOT16	04/03/82	04/16/82	P*X0	F	256	6	6	6
IFC	04/03/82	04/16/82	P*X0	F	256	13	13	13
RUNCOBOL/SYS	03/27/82	04/16/82	D*X0	F	256	68	68	68
VIDTEX	10/13/80	04/07/82	D*X0	F	1	+++	13	+++
SAMPLE1/PRO	04/09/82	04/09/82	D*X0	V	+++	+++	2	2
DATM32/TXT	04/09/82	04/09/82	D*X0	V	+++	+++	1	1
DOBUDGET/SRC	04/09/82	04/09/82	D*X0	V	+++	+++	1	1
DEMOPROG/1	04/09/82	04/09/82	D*X0	V	+++	+++	1	1
DIRECAC/FLE	04/09/82	04/09/82	D*X0	V	+++	+++	1	1
MYPROG	04/09/82	04/09/82	D*X0	V	+++	+++	1	1

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You can also use a wildcard to find the filename you want. For example, if the filename does not have an extension, you can avoid a long directory listing that consists of all files with and without extensions by typing:

DIR * <ENTER>

TRSDOS-16 returns a directory listing that is substantially shorter because it only lists the files without extensions:

Disk Name:TRSDOS			Drive:4		04/09/82		00.26.21	
File Name	Created	Updated	Atrb	File	Rec	# of	----Sectors----	
	MM/DD/YY	MM/DD/YY		Typ	Len	Records	Alloc	Used
DESIGN2	04/05/82	04/05/82	P*X0	F	256	2	2	2
ASM16	02/25/82	04/16/82	D*X0	F	256	148	148	148
LINK16	02/25/82	04/16/82	D*X0	F	256	64	64	64
EDIT16	03/27/82	04/16/82	D*X0	F	256	50	50	50
BOOT16	04/03/82	04/16/82	P*X0	F	256	6	6	6
IFC	04/03/82	04/16/82	P*X0	F	256	13	13	13
VIDTEX	10/13/80	04/07/82	D*X0	F	1	+++	13	+++
MYPROG	04/09/82	04/09/82	D*X0	V	+++	+++	1	1

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SWAPPING DISKETTES

Whenever you want to change the diskettes in any of your floppy drives, you must perform the DISMOUNT/MOUNT operations. (NEVER change a diskette when a file on that diskette is in use or open.)

To swap diskettes, first remove the diskette(s) you want to change and type:

DISMOUNT <ENTER>

This informs TRSDOS-16 that you have just removed diskettes from the drives.

TRSDOS-16 returns the prompt:

INIT DONE

Insert other diskettes, close the drive door, and type:

MOUNT <ENTER>

Again TRSDOS-16 will acknowledge the change of diskettes with:

INIT DONE

You can begin using the diskettes.

(See the MOUNT and DISMOUNT commands in the next section for more information.)

When you swap a single-sided diskette to a double-sided diskette (or double-sided to single-sided) in Drive 0, it is necessary to press the RESET switch after swapping the diskettes.

